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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,990	04/27/2001	John R. Wolf	D-42816-02	1833

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EXAMINER

TRAN, LOUIS B

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 11/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/843,990

Applicant(s)

WOLF ET AL.

Examiner

Louis B Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the process of stacking a first bag and second bag and sealing as well as the process carried out in a rotary vacuum machine must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

Page 39 line 15 makes reference to Figures 5 and 6 when there are no such figures in the application and no such figures are listed in the description of the drawings.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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4. Claims 21-33 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With respect to claim 21, applicant claims a process for packaging a product and claims stacking and sealing excess bag length of each of the bagged products; however, no drawings show how a process is practiced nor does the specification cite what orientation is meant by stacking. The drawings are drawn to a process of making the bag material and are irrelevant to the invention at hand.

With respect to claim 24, there is no depiction or description of how this process can be carried out in a rotary chamber vacuum machine. Merely stating that this can be accomplished in the summary of the invention is not enabling.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21, 22, 25-27, 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henaux (5,845,463) in view of Nishimoto et al. (5,336,549).

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Henaux discloses the invention substantially as claimed including placing a first product into a flexible, heat-shrinkable bag, the bag having an open top whereby a first bagged product having excess bag length results, repeating the placing step with a second product and a second bag, whereby a second bagged product results, stacking at least the first and second bagged products so that the excess bag length of each of the bagged products are within a sealing distance of a means for heat sealing, heat sealing the inside layer of the first bag to itself in the region between the open end of the first bag and the product, and the inside layer of the second bag to itself in the region between the open end of the second bag and the product so that the first product is completely sealed within the first bag and the second product is completely sealed with the second bag, the sealing being carried out at a temperature so that the resulting packaged products can be freely separated from one another without layer delamination as seen in Figure 1 (as in claim 21), wherein 2 and 3 bagged products are stacked on top of one another during heat sealing (as in claim 25 and 26).

Henaux does not specifically disclose a bag comprising a multi-layer film comprising a first layer, which is an inside bag layer, and which comprises polyolefin, a second layer comprising at least one member selected from the group consisting of polyolefin, polystyrene, and polyurethane, a third layer comprising a polyamide having a melting point of 160 °C and below and a fourth layer, which is an outside bag layer, comprising polyester.

However, Nishimoto et al. teaches the use of a bag comprising a multi-layer film comprising a first layer having an outer layer of an ethylene-butylene copolymer, a

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second layer of saponified ethylene/vinyl acetate, which is a polyolefin as described on lines 21-25 of page 18 in the applicant's specification, comprising about 13% of the total film thickness (as in claim 22), a layer comprising a polyamide with melting temperature of 135°C (as in claim 31), and a layer of polyester with a melting temperature of 237 °C (as in claim 33), wherein the polyester comprises from about 80 to about 95 mole percent terephthalate units (as in claim 30), wherein the bag is produced by sealing the first layer to itself, whereby the first layer is an inside bag layer and fourth layer is an outside bag layer as discussed in column 1, lines 5-45, for the purpose of improved heat sealing as in column 1, lines 5-10.

Therefore, it would have been obvious to one having ordinary skill in the art to provide Henaux with a bag of Nishimoto et al. in order to achieve higher quality heat sealing.

With respect to claims 27 and 29, the modified process of Henaux discloses the claimed invention except for polyamide making up at least 40 or 50 weight percent of the third layer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to find an optimum weigh percent, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to claim 32, the modified process of Henaux discloses the claimed invention except for a melting point for polyolefin in the first layer from about 50°C to less than 125 °C. It would have been obvious to one having ordinary skill in the art at the time the invention was made to find an optimum melting point range, since it has

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been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claims 23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henuax (5,845,463) in view of Nishimoto et al. (5,336,549) in further view of Oberle et al. (4,469,742).

The modified process of Henuax does not specifically show an O₂ barrier layer, the fifth layer comprising at least one member selected from the group consisting of EVOH, PVDC, polyalkylene carbonate, polyamide, and polyethylene naphthalate.

However, Oberle et al. teaches the use of a barrier layer consisting of EVOH for the purpose of providing delamination resistance as described in column 4, line 50. Oberle et al. also teaches film oriented with a shrink capacity of 30-55% at 185°F as in column 5, lines 29-32 (as in claim 28).

Therefore, it would have been obvious to one having ordinary skill in the art to provide a barrier layer in order prevent delamination.

With respect to claim 28, although Nishimoto et al. does not specifically teach the thickness uniformity of the film it would be obvious to one of ordinary skill to use films with a high thickness uniformity, in order to maintain a uniformity in physical properties throughout the film.

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8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henaux (5,845,463) in view of Nishimoto et al. (5,336,549) in further view Owensby et al. (4,550,548)

The modified process of Henaux discloses the invention substantially as claimed but does not show the process being carried out in a rotary chamber vacuum machine. However, Bullock et al. teaches the use of a rotary chamber vacuum machine for the purpose of sealing multi-layer material as seen in Figure 2

Therefore, it would have been obvious to one having ordinary skill in the art to provide a rotary chamber vacuum machine in order to carry out the process in order to adapt to standard manufacturing settings as in column 1, line 11.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are Chung et al., Switlik et al., Sosnik et al., Kujubu, Van Der Zon.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis B Tran whose telephone number is 703-305-0611.

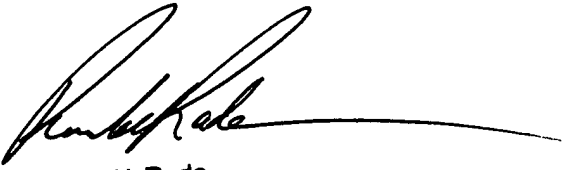
The examiner can normally be reached on 8AM-6PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3579 for regular communications and 703-305-3579 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

lbt
October 31, 2002



Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700